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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,885	07/29/2003	David N. Nichols	86533PCW	5571
Thomas H. Clo	7590 01/29/2007 se	EXAMINER		
Patent Legal Staff			GEBREMARIAM, SAMUEL A	
Eastman Kodak Company 343 State Street			ART UNIT	PAPER NUMBER
Rochester, NY 14650-2201			2811	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
2 MONTHS		01/29/2007	PAPER	

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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/629,885

Filing Date: July 29, 2003 Appellant(s): NICHOLS ET AL.

> Peyton C. Watkins/lam For Appellant

EXAMINER'S ANSWER

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This is in response to the appeal brief filed 11/03/2006.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of the claimed subject matter

The summary of the claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be reviewed on appeal

The appellant's statement of the grounds of rejection is correct.

(7) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence relied upon

The following is a listing of the evidence (e.g., patents, publications, official notice, and admitted prior art) relied upon in the rejection of claims under appeal.

5,192,990

Stevens

3-1993

4,878,120

Matsumoto et al.

10-1989

(9) Grounds of Rejection

Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stevens, US patent No. 5,192,990 in view of Matsumoto et al. US patent No. 4,878,120.

Regarding claim 1, Stevens teaches (figs. 1 and 4, col. 2, lines 44-68) an image sensor (10) comprising: (a) an image sensing portion (12) for receiving incident light that is converted to a plurality of charge packets; (b) a transfer mechanism for transferring the charge packets from the image sensing portion (from elements 12 to 14, col. 2, lines 54-62); and (c) an output structure (16) that receives the charge packets from the transfer mechanism for transporting output signals from the image sensor.

Stevens does not teach the output structure comprises a transparent conductor for a gate electrode.

The use of transparent conductor as a gate electrode is conventional and also taught by Matsumoto (figs. 3A and 3B, col. 6, lines 1-16) in the structure an image sensor.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a transparent conductor as a gate electrode as taught by Matsumoto in order to improve electrical conductivity of the contact in the light receiving region.

Regarding claim 2, Stevens as modified, the transparent conductor is indium tin oxide (col. 6, lines 1-16, Matsumoto).

Regarding claim 3, Stevens as modified teaches the output structure is a source follower (col. 3, lines 38-56, Stevens).

(10) Response to Argument

Applicant's arguments filed 10/27/2005 have been fully considered but they are not persuasive.

Applicant argues that a prima facia case of obviousness is not established when the prior art did not suggest the combination or convey to those of ordinary skill in the art a reasonable expectation of success of making it. Applicant further states the standard used in the rejection is an obvious-to-try standard, which is contrary to the requirements for maintaining a prima facia case of obviousness.

In response, as stated in the final rejection, Stevens teaches primarily the same structure as the claimed invention with the exception that Stevens does not explicitly teach the type of material that is used as the output gate material. However applicant admits on page 4 of the brief, that Stevens's output electrode is made of polysilicon.

And polysilicon is a well-known transparent conductor. As stated in the last office action, the reference by Matsumoto teaches using a transparent material such as ITO as a gate electrode because ITO provides better conductivity and is also transparent to light.

Therefore contrary to applicant's argument that the standard used in the rejection is an obvious to try, a person of ordinary skill in the art would be motivated to try and see the effect of using a material such as ITO that is commonly used as a gate material as an output electrode.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

SAG January 18, 2007

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SAG

Evaminer 2811

Eastman Kodak Company